In the Claims

1. (Currently amended) An endovascular graft comprising an expandable stent portion and a stent cover portion, wherein the stent cover portion comprises a porous, fibrous material having both an outer perigraft surface and an inner luminal surface, and is coated on at least the outer surface with a bioactive agent covalently attached by the activation of photoreactive groups provided by the stent cover portion, by the bioactive agent, and/or by a linking agent in the form of a thin, conformal coating in a manner sufficient to prevent endoleaking, wherein the conformal coating comprises the bioactive agent attached to the fibers of the material without occluding its pores.

2. (Canceled)

3. (Previously presented) A graft according to claim 1 wherein the stent cover portion is prepared from a porous material selected from PET and ePTFE and the bioactive agent comprises collagen.

4. (Canceled)

5. (Canceled)

6. (Original) A graft according to claim 1 wherein the agent is selected from the group consisting of proteins having a specific hemostatic effect, and positively charged compounds having a nonspecific hemostatic effect.

7. (Previously presented) A graft according to claim 6 wherein the agent comprises a protein or the active portions and domains of a protein selected from the group consisting of collagen, thrombin, fibrinogen, elastin and von Willebrand factor.

8. (Canceled)

9. (Canceled).

10. (Previously presented) An endovascular graft comprising an expandable stent portion and a porous stent cover portion selected from PET and ePTFE, the porous stent cover portion being coated with a bioactive agent comprising collagen, wherein the collagen is covalently attached in a thin, conformal coating to the porous stent cover portion in a manner sufficient to prevent endoleaking and promote long term fibrous tissue ingrowth, and wherein the coating is covalently attached by the activation of photoreactive groups provided by the porous stent cover portion, by the bioactive agent, and/or by a linking agent.

11. (Previously presented) A method of preparing an endovascular graft comprising an expandable stent portion and a stent cover portion, comprising the step of coating at least the outer surface of the stent cover portion with a bioactive agent that is covalently attached by the activation of photoreactive groups provided by the stent cover portion, by the bioactive agent, and/or by a linking agent in the form of a thin, conformal coating in a manner sufficient to prevent endoleaking.

12. (Canceled)

13. (Previously presented) A method according to claim 11 wherein the stent cover portion is prepared from a porous material selected from PET and ePTFE and the bioactive agent comprises collagen.

14. (Canceled)

15. (Canceled)

16. (Previously presented) A method according to claim 11 wherein the agent is selected from the group consisting of proteins having a specific hemostatic effect, and positively charged compounds having a nonspecific hemostatic effect.

17. (Previously presented) A method according to claim 16 wherein the agent comprises a protein or the active portions and domains of a protein selected from the group consisting of collagen, thrombin, fibrinogen, elastin, and von Willebrand factor.

18. (Canceled)

19. (Canceled)

20. (Canceled)

21. (Currently amended) A method of preventing endoleaking in the course of deploying and using an endovascular graft that comprises an expandable stent portion and a stent cover, the method comprising the step of first coating the stent cover ~~in the manner of claim 11~~ by a method that comprises the step of coating at least the outer surface of the stent cover portion with a bioactive agent that is covalently attached by the activation of photoreactive groups provided by the stent cover portion, by the bioactive agent, and/or by a linking agent in the form of a thin, conformal coating.

Please add new claims 22-43 as follows:

22. (New) A method according to claim 21 wherein the stent cover portion is prepared from a porous material selected from PET and ePTFE and the bioactive agent comprises collagen.

23. (New) A method according to claim 21 wherein the agent is selected from the group consisting of proteins having a specific hemostatic effect, and positively charged compounds having a nonspecific hemostatic effect.

24. (New) A method according to claim 23 wherein the agent comprises a protein or the active portions and domains of a protein selected from the group consisting of collagen, thrombin, fibrinogen, elastin and von Willebrand factor.

25. (New) A method according to claim 21 wherein the endovascular graft comprises an expandable stent portion and a porous stent cover portion selected from PET and ePTFE, and the bioactive agent comprises a protein or the active portions and domains of a protein selected from the group consisting of collagen, thrombin, fibrinogen, elastin and von Willebrand factor.

26. (New) A method according to claim 21 wherein the coating is provided on the perigraft, as opposed to luminal, surface of the stent cover.

27. (New) A method according to claim 21 wherein the coating adds about 5%, or less, to the original thickness of the material used as the stent cover portion.

28. (New) A method according to claim 21 wherein the bioactive agent used to coat the surface is itself photoderivatized.

29. (New) A method according to claim 21 wherein the stent cover portion is prepared from a porous material selected from PET and ePTFE, the agent comprises a protein or the active portions and domains of a protein selected from the group consisting of collagen, thrombin, fibrinogen, elastin and von Willebrand factor, the coating is provided on the perigraft, as opposed to luminal, surface of the stent cover and adds about 5%, or less, to the original thickness of the material used as the stent cover portion.

30. (New) A method according to claim 29 wherein the bioactive agent used to coat the surface is itself photoderivatized.

31. (New) A method of preventing endoleaking in the course of deploying and using an endovascular graft, the method comprising the steps of:

a) providing an endovascular graft comprising an expandable stent portion and a stent cover portion, wherein the stent cover portion comprises a porous, fibrous material having both an outer perigraft surface and an inner luminal surface, the cover portion having a bioactive

agent on at least the outer surface in the form of a thin, conformal coating covalently attached to the fibers of the material without occluding its pores, by the activation of photoreactive groups provided by the stent cover portion, by the bioactive agent, and/or by a linking agent, and

b) implanting the stent in the vessel in a manner that avoids endoleaking.

32. (New) A method according to claim 31 wherein the stent cover portion is prepared from a porous material selected from PET and ePTFE and the bioactive agent comprises collagen.

33. (New) A method according to claim 31 wherein the agent is selected from the group consisting of proteins having a specific hemostatic effect, and positively charged compounds having a nonspecific hemostatic effect.

34. (New) A method according to claim 33 wherein the agent comprises a protein or the active portions and domains of a protein selected from the group consisting of collagen, thrombin, fibrinogen, elastin and von Willebrand factor.

35. (New) A method according to claim 31 wherein the endovascular graft comprises an expandable stent portion and a porous stent cover portion selected from PET and ePTFE, and the bioactive agent comprises a protein or the active portions and domains of a protein selected from the group consisting of collagen, thrombin, fibrinogen, elastin and von Willebrand factor.

36. (New) A method according to claim 31 wherein the coating is provided on the perigraft, as opposed to luminal, surface of the stent cover.

37. (New) A method according to claim 31 wherein the coating adds about 5%, or less, to the original thickness of the material used as the stent cover portion.

38. (New) A method according to claim 31 wherein the bioactive agent used to coat the surface is itself photoderivatized.

39. (New) A method according to claim 31 wherein the stent cover portion is prepared from a porous material selected from PET and ePTFE, the agent comprises a protein or the active portions and domains of a protein selected from the group consisting of collagen, thrombin, fibrinogen, elastin and von Willebrand factor, the coating is provided on the perigraft, as opposed to luminal, surface of the stent cover and adds about 5%, or less, to the original thickness of the material used as the stent cover portion.

40. (New) A method according to claim 31 wherein the bioactive agent used to coat the surface is itself photoderivatized.

41. (New) A method according to claim 31 wherein the agent is immobilized in an amount between about 0.05 $\mu g/cm^2$ to about 10 $\mu g/cm^2$.

42. (New) A method according to claim 31 wherein the endovascular graft is provided in the form of a collapsed small diameter tube of on the order of two mm or less overall diameter, and can be expanded to form a larger diameter tube *in situ* of between about six mm and about thirty mm.

43. (New) A method according to claim 39 wherein the bioactive agent used to coat the surface is itself photoderivatized, and is immobilized in an amount between about 0.05 $\mu g/cm^2$ to about 10 $\mu g/cm^2$, and wherein the endovascular graft is provided in the form of a collapsed small diameter tube of on the order of two mm or less overall diameter, and can be expanded to form a larger diameter tube *in situ* of between about six mm and about thirty mm.